



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

May 30, 2013

Via E-Mail

Thomas M. Palay, Ph.D.
President and Vice Chairman of the Board
Cellular Dynamics International, Inc.
525 Science Drive
Madison, WI 53711

**Re: Cellular Dynamics International, Inc.
Amended Confidential Draft Registration Statement on Form S-1
Submitted May 17, 2013
CIK No. 0001482080**

Dear Dr. Palay:

We have reviewed your amended confidential draft registration statement and have the following comment. Please respond to this letter by providing the requested information and either submitting an amended confidential draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended confidential draft registration statement or filed registration statement, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Research and Development, page 48

We acknowledge the disclosure provided in response to previous comment 2. Please represent to us that your overhead costs allocated to research and development expenses do not include general and administrative expenses that are not clearly related to your research and development activities. Otherwise, please explain to us the nature of the overhead costs you allocate to research and development expenses and how your allocation complies with ASC 730-10-25-2e.

General

If you intend to respond to this comment with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Thomas M. Palay, Ph.D.
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Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Dana Hartz at (202) 551-3648 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Amy Reischauer at (202) 551-3793 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-Mail
Anna M. Geyso
Godfrey & Kahn, S.C.
780 North Water Street
Milwaukee, WI 53202